

Available online at www.sciencedirect.com

Procedia Social and Behavioral Sciences 2 (2010) 5084–5088

Procedia
Social and Behavioral Sciences

WCES-2010

The curriculum for the subject environmental studies in the primary school in Slovenia

Vlasta Hus^a *^a Faculty of Education, University of Maribor, 2000 Maribor, Slovenia

Received November 10, 2009; revised December 11, 2009; accepted January 21, 2010

Abstract

The subject Environmental studies appeared in the programme of the nine-year primary school system in the Republic of Slovenia with the curricular reform at the end of the 20th century. It succeeded the subject Natural and social studies which was taught as an independent subject at primary school level from 1957. The aim of the present paper is to demonstrate the characteristic of the new curriculum for the subject Environmental studies. It is possible to conclude that the curriculum for Environmental studies is designed very “openly”, is realisable and requires well trained teachers.

© 2010 Elsevier Ltd. Open access under [CC BY-NC-ND license](http://creativecommons.org/licenses/by-nc-nd/3.0/).

Keywords: Curricular reform; primary school; subject environmental studies

1. Introduction

The subject Environmental studies appeared in the programme of the nine-year primary school system in the Republic of Slovenia with the curricular reform at the end of the 20th century. It succeeded the subject Natural and social studies which was taught as an independent subject at primary school level from 1957. Before that similar contents were dealt with in the framework of the following subjects: Lessons in matter, Visual instruction, Demonstrative lessons, which were a substantial part of the subject mother tongue. The subject Environmental studies thus has its history which is (through the name, goals and contents) witness to the fact that it had a specific role in specific social-historical periods.

The forming of the subject Environmental studies was conditioned by the social changes in the Republic of Slovenia in the beginning of the 1990s, with the new conception of the primary school system, with the discovering of the flaws in the Slovene educational system, with the tendency toward greater comparability with similar subjects in other countries, especially in Europe, and last but not least with the insufficiencies observed in the teaching of the subject Natural and social studies. These are: difficulties in defining the range and depth of the teaching content, lack of or insufficient vertical links in the curriculum, an excessively deductive approach to the treatment of teaching contents, realisation of mainly material tasks during lessons, etc. (Šegula, 1964; Cenčič, 1983; Adamič, 1990; Piciga, 1993; Hus, 1996).

* Vlasta Hus. Tel.: +00386 02 62 31 900;

E-mail address: Vlasta.Hus@uni-mb.si

The drafting of the curriculum for Environmental studies was in the domain of professionals from each subject working on the basis of the instructions of the National Curricular Council. The report on the work of the Subject Curricular Committee (SCC) for the subject Environmental studies shows that the committee made a detailed analysis of the existing curriculum for the subject Natural and social studies and found that it was particularly the activities of the pupils defined in the old curriculum that served as a basis for the preparation of the new one. The contents and the activities of the pupils were compared also with other, foreign curricula. The following curricula and documents were considered: the English national curriculum, the Scottish curriculum for Environmental studies, the American project 2061, the American project High Scope, the Dutch curriculum for natural sciences, the Norwegian curriculum for natural and social studies, the Italian methodical instructions for the national curriculum and English, French and Polish text-book literature.

The committee included those contents in the suggestion for the layout of the curriculum which occurred in several other foreign curricula as well as contents they found would ensure the basic goals of the curricular reform.

The Subject Curricular Committee for the subject Environmental studies included also school teachers and preschool teachers (less of these) into the national evaluation of the layouts for the curriculum. Initially, the evaluation took place with the help of sample study groups and later with the help of all study groups. The committee considered 80% of the comments made by school and pre-school teachers.

The curriculum for the subject Environmental studies was adopted by the Professional Council of RS at its 22nd meeting of 3 December 1998. In the school year 1999/2000 it was gradually introduced in 42 schools across the Republic of Slovenia which chose to start with the nine-year primary school system.

The aim of the present paper is to demonstrate the characteristic of the new curriculum for the subject Environmental studies.

Methodology of Research

In the study, we used the following methods: descriptive, comparative, the classification method, the method of analysis and synthesis, the methods of generalization and specification (Zelenika, 2000).

Data was gathered through analysis of documents (curriculum for Environmental studies and also Natural and social sciences). For analyzing the syllabuses we used the main elements of curriculum (Eash, 1991): planning strategy, goals, contents, manners of execution of the curriculum, evaluation.

The research is limited to the curriculum for the first grade of primary school.

2. Results and interpretation

2.1. The strategy of curricular planning

The curriculum for the subject Environmental studies is goal-oriented in the educational sense. It also takes into account elements of developmental process planning. The aims of the lessons are defined in terms of operative and developmental goals.

2.2. The number of lessons in the primary school programme

The number of lessons for the subject Environmental studies in the first grade of the nine-year primary school is the same as the number of lessons for the subject Natural and social sciences in the first grade of the eight-year primary school, that is 105 lessons per year or 3 lessons per week.

2.3. Teaching goals in the curricula

The curriculum for the subject Environmental studies defines the general goals of the subject, and the common goals of the contents of individual subjects (contents from the fields of sociology, history, biology, geography, physics and information and technology), which are further concretized and defined for each grade separately. The operative goals are listed linearly. Relating to their execution, the following was said: "We realise them through

the pupils' activities. The activities can achieve several goals simultaneously, even (the) goals of different contents. In the same manner it is possible to achieve one goal through various activities. The correlations are indicated in the didactic recommendations and inter-subject connections. (Cunder, p.8)

The connecting of the goals into unified didactic groups is left to the teachers due to the increasing tendency to accommodate the teachers with their need for autonomy.

It has been established that the curriculum for the subject Environmental studies includes all three levels of periodisation of the teaching goals, namely from the general and phasal to the concrete (operative) ones.

The operative goals in the curriculum for the subject Environmental studies are primarily defined with expressions relating to processes, such as: pupils familiarize with, pupils recognize, pupils develop, pupils experience, pupils distinguish. Goals defined in terms of processes point to the fact that the authors of the curriculum mainly took learning processes as the starting point. They were oriented towards the development of the child's abilities and skills rather than towards defining the results, behavioural patterns resulting from the influence of the lessons. These goals can thus not be considered operative in Magers sense, where the focus would merely be on the planning and consequently on the monitoring of explicitly expressed changes in the pupils' behaviour. Unlike operative goals, which are more binding and defining, process goals enable greater creativity on the side of the pupils and the teachers. A developmental defining of the teaching goals also means that they are being carried out through a longer period of time (the first triad) and not only in the first grade.

We were also interested in the equal distribution of the teaching goals in the syllabus for Environmental studies. Bloom's classification (Požarnik, 1991) of teaching goals was used as the criterion for the analysis. We found the prevalence of cognitive goals. From among the 75 defined goals, as many as 65 were cognitive goals, only 6 were psychomotor and 4 connative ones. This, however, does not mean that lessons in Environmental studies should realise mainly cognitive teaching goals, since one should be aware of their complexity and multi-functionality. The teaching goals "should simultaneously engage all the basic layers of the young personality, the cognitive, the affective and the psychomotor ones, even though they are not specifically emphasised in the formulation of a particular goal. This needs to be mentioned since the teaching goals usually express merely the educational purposes, while character education is defined only in the general goals, which diminish and are lost the closer one gets to the concrete goals." (Strmčnik, 1996, p. 310)

2.4. Teaching contents

The curriculum for Environmental studies for the first grade, suggests contents written down in the third column immediately following the columns: operative goals and examples of activities. They are listed in succession as subject contents integrating the subject Environmental studies. One might say that the teaching content was chosen in accordance with the exemplary principle, namely only the most representative contents are defined in the form of key words, basic notions (for example, man is a unique and unrepeatable living being, rules of social life (in the family, at school, in the cultural environment)).

In concretising the national plan for the subject Environmental studies the teachers and their autonomy are entrusted to themselves on the basis of the teaching goals defined in terms of content to plan the didactic topic groups in such a manner so as to account for the logical, temporal, psychological unity and that of content, which is the condition for the formation of a child's integral view of the world.

It is our opinion that this will present a problem to the teachers, at least in the initial periods, which is evident also from their opinions and remarks to the suggestion of the curriculum for the subject Environmental studies. Demands occurred, even, that the execution of teaching goals be defined in terms of time, that the fenological principle should remain the basic principle in the planning of teaching goals and contents in animate nature, and also requirements that the didactic recommendations be specified more in detailed.

The compared curricula have many contents in common, since both stem from the child's close environment. Both also have the same basic goal, namely that children should familiarise with the world in which they live.

In the curriculum for Environmental studies, where the teaching content appears more in the function of realising the teaching goals, the teaching goals are merely suggested to the teacher. The starting point in the choice of teaching contents is the defined (operative) goals and standards of knowledge.

In the curriculum for Environmental studies the teaching contents are arranged in the form of a spiral, which means that from the first grade the teaching contents gradually widen at a minimal amount of repetition. There is

only as much repetition needed to ensure a continuity and correlation with the increasingly demanding teaching contents.

2.5. Ways of realising the curricula

As defined in curricular theory the operative teaching goals are an unavoidable condition for choosing the best didactic strategies in the teaching-goal approach to the forming of the curriculum. This has been taken into consideration also in the curriculum for the subject Environmental studies, where the defined accounts of the pupils' activities, the suggested teaching contents, the special didactic recommendations and the inter-subject connections are considered as ways to the realisation of the operative teaching goals.

The pupils' activities are in the curriculum for the subject Environmental studies defined as a suggestion. They include a variety of activities. The analysis of these activities was performed according to the classification set up by Bogner (1987). We found that the prevailing pupils' activities are practical ones, followed by expressive activities and to a lesser extent the sensory and mental ones. The pupils would thus in the framework of the subject Environmental studies to a large extent through practical activities realise mainly cognitively set learning goals. "We became aware of another leap in the planning of the subject Environmental studies, namely the leap from what pupils can do with their hands to what they can do in their mind. From manual skills on to expressing what had been done, and reflecting on how it was done." Krnel (1996, p.1)

It can be established that didactic recommendations in the curriculum for the subject Environmental studies give the teacher the freedom of more autonomous conduct. The curriculum for Environmental studies places greater emphasis on the experiences and ideas of the children in planning the lessons. Special attention is paid to the pupils' activities within the teaching process (constructivist approach), where they can develop their ideas and make new discoveries in the course of concrete activities. It is possible to say that the pupils, their experiences, their prior knowledge and their development are the starting point of the planning, realisation and evaluation of the teaching process. The didactic recommendations of the curriculum for Environmental studies place special emphasis on the role of the teacher. The teacher is the source of knowledge and the centre of events. She leads the pupils and guides them towards various activities. "Unlike in the traditional school, the teachers' attention here is redirected from the programme to the pupils. The teachers monitor the development and progress of the pupils, and the curriculum merely presents a means to achieve the desired or anticipated goals" (Bezjak, 1996, pp. 14-15). The didactic recommendations for Environmental studies place greater emphasis on research and experimenting by the pupils or on organizing lessons which would enable the development of such skills and abilities. The curriculum for the subject Environmental studies defines the inter-subject connections with other subjects separately (in a separate column) more explicitly and with greater emphasis. By this the effort to obtain holistic knowledge is indicated.

2.6. Evaluation of curricula

An important element in the planning of the curriculum, as far as curricular theory is concerned is evaluation. The curriculum for Environmental studies anticipates that in the evaluation of it the teachers make use of the instructions for the descriptive monitoring and evaluating of the pupils' achievements, equipped with a suggested catalogue of knowledge for the individual grades and with the basic standards of knowledge for the end of the first triad. All this is an appendix to the national curriculum (for primary schools).

We think that a catalogue of the teaching goals for the subject Environmental studies, where not only the knowledge of the pupils would be concretised but also their abilities and personal characteristics, would be more useful to the teachers in their evaluation of the pupils' achievements.

3. Conclusions

The curriculum for Environmental studies is designed very "openly". Its most binding element is the teaching goals. Teaching goals defined at various levels mean being better defined in terms of range and depth of the teaching content, which was one of the problems referred to in the curriculum for Natural and social studies. However, in the planning and realisation of the curriculum it is especially important to include the aspect of process (the connection between the general and the concrete goals), the integration of goals from natural studies with those of social

studies, accounting for their complexity and multi-functionality, accounting for individualization and differentiation,...

The set teaching goals are to be achieved mainly through an increased activity on the side of the pupils in the learning process. In accordance with the constructivist theory, the pupils are expected to build their knowledge on their own, the teacher only giving guidance. The emphasis would be on the practical activities of the pupils in accordance with their stage of development.

The role of the teaching content is changed. Its function becomes the realisation of the teaching goals and to a greater extent left to the choice of the teacher. The teachers, namely their autonomy is trusted to on the basis of teaching goals defined in terms of content plan the didactic groups of topic in such a manner that the logical, temporal and psychological unities are included as well as that of content, which is the condition for the structuring of the pupil's integral view of the world.

The special-didactic recommendations, as already the name itself implies, differ from the instructions defined in the curriculum for the subject Natural and social studies. They present a novelty in the field of methodology and didactics and the modern approaches to teaching.

The standards of knowledge in the curriculum are the basis for evaluating the successfulness of the lessons. It should, however, be noted that they can not be the sole criterion of successfulness, but should be supplemented by tools for monitoring the development and progress of the pupils also in other areas.

It is possible to conclude that the curriculum for Environmental studies is based on a modern concept, is realisable and requires well trained teachers.

References

- Adamič, M. (1990). Spoznavanje narave in družbe (1. do 3. razred). V: Logar, T.(ur.), Evalvacija programa življenja in dela osnovne šole. Ljubljana: Zavod RS za šolstvo.
- Bela knjiga o vzgoji in izobraževanju v Republiki Sloveniji. (1995). Ljubljana: Ministrstvo za šolstvo in šport.
- Bezjak, Z. (1996). Didaktična prenova in opisno ocenjevanje. V: Opisno ocenjevanje v nižjih razredih osnovne šole (iz prakse za prakso). Ljubljana: Zavod RS za šolstvo.
- Bloom, S.B. (1970). Taksonomija ili kvalifikacija obrazovnih i odgojnih ciljeva. Beograd.
- Bognar, L. (1987). Igra pri pouku na začetku šolanja. Ljubljana: Državna založba Slovenije.
- Cunder, K. (1998). Glavne novosti v predlogu učnega načrta za Spoznavanje okolja. Ljubljana: PRKK za Spoznavanje okolja.
- Eash, M.J. (1991). Curriculum components. V: Levy (ur.), The International encyclopedia of Curriculum. Oxford, New York...: Pergamon press. Str. 71-73.
- Hus, V. (1996). Predmet Spoznavanje narave in družbe v teoriji in praksi (magistrsko delo). Ljubljana: Filozofska fakulteta-oddelek za pedagogiko.
- Krnel, D. (1996). Nastajanje nove podobe predmeta Spoznavanje okolja v prvem triletnju osnovne šole. Ljubljana: PRKK za Spoznavanje okolja.
- Kroflič, R. (1992). Teoretski pristopi k načrtovanju in prenovi kurikulumu. Ljubljana: Center za razvoj univerze.
- Marentič-Požarnik, B. (1991). Pomen operativnega oblikovanja vzgojno izobraževalnih smotrov za uspešnejši pouk. V: Blažič, M.(ur.), Izbrana poglavja iz didaktike. Novo Mesto: Pedagoška obzorja.
- Nacionalni kurikulumni svet. (1996).Izhodišča kurikularne prenove. Ljubljana.
- Nacionalni kurikulumni svet. (1998). Učni načrt Spoznavanje okolja.
- Piciga, D. in Japelj, B. (1993). Rezultati mednarodnih primerjalnih študij naravoslovja za osnovno šolo: Slovenski učenci v IAEF študiji. Educa, str. 136-174.
- Program življenja in dela osnovne šole (1984). Naravoslovno-matematično vzgojno izobraževalno področje, 4. zvezek. Ljubljana: Zavod SRS za šolstvo.
- Skribe,D, Umek, M. (1995). Opisno ocenjevanje otrokovih dosežkov pri pouku Spoznavanje narave in družbe. V: Razdevšek-Pučko, C. (ur.). Opisno ocenjevanje. Novo mesto: Pedagoška obzorja.
- Strmčnik, F. (1996). Vzgojno-izobraževalni cilji. Ljubljana: Sodobna pedagogika, 47, str. 309-324.
- Šegula, I. (1964). Učni načrt osnovne šole v teoriji in praksi (rezultati petletnega preizkusa). Ljubljana: Zavod za napredek šolstva.
- Zelenika, R.(2000). Metodologija i tehnologija izrade znanstvenog i stručnog djela (4.izd.). Rijeka. Ekonomski fakultet u Rijeci.